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ROUTINE CLOUD-BOUNDARY ALGORITHM DEVELOPMENT FOR ARM MICROPULSE LIDAR

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ABSTRACT

An operational cloud boundary algorithm (Wang and Sassen 2001) has been implemented for use with the ARM micropulse lidar (MPL) systems. As part of this value-added product (VAP) named MPLCMASK, we have applied range, background, deadtime, and overlap corrections to the measured backscatter lidar signal to provide a corrected attenuated backscatter profile. This VAP will be the primary lidar cloud mask for input to the Active Remotely Sensed Cloud Locations (ARSCL) product and will be applied to all MPL systems, including historical data sets. We will present examples of the available data products.